REMARKS

Claims 1 and 3-6 are pending in the application. Claim 1 is amended to incorporate the subject matter of Claim 2, now canceled. Claim 1 is further amended to recite "A liquid-crystal cell substrate ~~for optical use~~ which comprises a ~~resinous~~ multilayer structure...". Claims 4-6 are amended to maintain consistency in the claims based on the amendment to Claim 1. No new matter is added.

Entry of the amendment along with reconsideration and review of the claims on the merits are respectfully requested.

Double Patenting Rejection and Claim Rejection Under 35 U.S.C. §102 based on Sugawa '518

A. Claims 1-2 and 4-5 are rejected under the judicially created doctrine of obviousness-type double patenting as assertedly being unpatentable over Claim 1 of U.S. Patent No. 6,500,518 to Sugawa et al.

The Examiner asserts that although the conflicting claims are not identical, they are not patentably distinct from each other because the present claims differ only in the recitation of the surface roughness values of 0.8 nm (and 0.2 nm) or lower which the Examiner believes to be an obvious limitation as Sugawa '518 provides for a smooth surface. The Examiner considers the roughness value of 0.8 nm or lower to be inherent, asserting that the same epoxy resin is used in the same manner.

B. Claims 1-6 are rejected under 35 U.S.C. §102(e) as assertedly being anticipated by US 6,500,518 to Sugawa et al. for the reasons given in the Office Action.

The Examiner cites Sugawa as teaching an epoxy optical sheet having a thickness of 500 micrometers or less, where the sheet is epoxy, is a multilayer structure, and has a smooth surface such as a roughness Ra of 0.02 micrometers or less, which assertedly meets Applicants' range of 0.8 nm (and 0.2 nm) or lower.

Applicants respectfully traverse each of these rejections.

Sugawa '518 fails to anticipate each and every element of Applicants' claimed invention. The present invention is an improvement over Sugawa '518. Although Applicants have previously pointed out that Sugawa is silent regarding "the R_a of 0.8 nm or lower" in the response to the previous Office Action, Applicants will hereinafter further explain Sugawa's lack of description on R_a of 0.8 nm or lower more specifically.

Applicants show the results of the comparison between Example 1 of the present invention and Example 1 of the Sugawa '518 patent in the following table.

	The present invention	The '518 patent
Average thickness (μm)	400	400
Thickness precision (standard deviation) (μm)	7	±40 or lower
R_a (nm)	0.2	Not measured (not described). It is considered that R_a should be 0.8 nm or more.

Because the "thickness precision" of the Sugawa '518 patent is as large as ±40 μm or lower, it can not be considered that R_a becomes 0.8 nm or lower. In the present invention, the standard precision of thickness of 7 μm can also be stated as having "thickness precision" of ±7 μm or lower. In the present invention, because the "thickness precision" is ±7 μm, R_a becomes 0.2 nm. The "thickness precision" is relative to R_a. In other words, the larger the value

of the thickness precision, the larger the R_a value. On the other hand, the smaller the value of the thickness precision, the smaller the R_a value.

Based on the foregoing reasons, Applicants submit that Sugawa '518 does not anticipate or render obvious the present claims.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the double patenting rejection and rejection under 35 U.S.C. § 102(e) based on Sugawa '518.

Claim Rejection Under 35 U.S.C. §102(e) based on Kon '444

Claims 1-5 are rejected under 35 U.S.C. §102(e) as assertedly being anticipated by US 6,136,444 to Kon et al. for the reasons given in the Office Action.

The Examiner cites Kon as teaching a multilayer resinous structure having a transparent plastic substrate of a thickness between 70 and 200 micrometers, where the transparent plastic substrate has a surface roughness R_a of 1 nm or less, which assertedly meets Applicants' range of 0.8 (and 0.2 nm) or lower.

Applicants respectfully traverse the rejection.

Claim 1 is amended, for example, to recite "wherein the multilayer structure comprises a layer of a cured epoxy resin as a base layer."

Kon '444 fails to anticipate each and every element of Applicants' claimed invention. For example, Kon '444 describes the surface roughness of a polycarbonate/plastic substrate, but does not describe the surface roughness of the uppermost layer. Further, Kon '444 is silent about the use of an epoxy resin as a base layer. Applicants have clearly distinguished the present

invention from Kon '444 by amending Claim 1 of the present application as described above. Because the use of the epoxy resin as the base layer improves the heat- resistance of the resulting substrate, when the substrate is used as a liquid-crystal cell substrate, the cell substrate can be used for a long period of time. On the other hand, Kon '444 is silent about any effect on durability.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 102(e) in view of Kon '444.

Claim Rejections - 35 U.S.C. § 103

Claim 6 is rejected under 35 U.S.C. §103(a) as assertedly being unpatentable over Kon et al. in view of US 6,261,664 to Beeson et al. for the reasons given in the Office Action.

The Examiner states that both Kon and Beeson are involved in the same technical field such as optical films, thereby asserting a *prima facie* case of obviousness. The Examiner asserts that it would have been obvious to one of ordinary skill in the art to include a bisphenol epoxy because Beeson assertedly teaches that it is conventional to use in optical films.

Applicants respectfully traverse the rejection.

The combination of Kon and Beeson fails to render *prima facie* obvious the presently claimed invention. For example, based on at least the reasons given above, Kon does not teach each and every element of at least Claim 1 from which Claim 6 depends upon, and Beeson fails to make up for Kon's deficiencies.

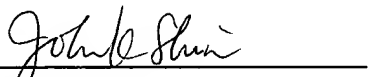
Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a).

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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23373
CUSTOMER NUMBER

Date: October 28, 2004